

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Work Order ID 157360

Tuesday, February 21, 2017 1:00:50 PM

157360

Page 2

Item ID: 647.3902 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Lower Deflector Assembly, High
Start Date: 3/3/2017 Start Qty: 3.00 ***3*** Cust Item ID:
Required Date: 3/8/2017 Req'd Qty: 3.00 ***3*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location: GA	0.00							
140									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER IAW MPP-120***								
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.05							
Quality Control									

17/5/8

DAS 36 9-89

DAS 21 9-89

MAY 05 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

Picklist Print

Tuesday, February 21, 2017 1:00:54 PM

Page 1

Work Order ID: 157360

157360

Parent Item: 647.3902

647.3902

Parent Item Name: Lower Deflector Assembly, High

Start Date: 3/3/2017

Required Date: 3/8/2017

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A 13.09.03 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

647.3912		Manufactured	No			110	Each	3.0000	1	3			
----------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

647.3912

Breakaway Tip Wirestrike for Wire Strike Kit

Location	Loc Qty	Loc Code
----------	---------	----------

CCK077	3	
--------	---	--

127896	3	
--------	---	--

647.3914		Manufactured	No			110	Each	4.0000	1	3			
----------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

647.3914

Breakaway Tip, Long

Location	Loc Qty	Loc Code
----------	---------	----------

CCK002	4	
--------	---	--

147490	4	
--------	---	--

MS20470AD6-12		Purchased	No			110	Each	395.0000	3	9			
---------------	--	-----------	----	--	--	-----	------	----------	---	---	--	--	--

MS20470AD6-12

Rivet

Location	Loc Qty	Loc Code
----------	---------	----------

CCK003	381	
--------	-----	--

m136643	381	
---------	-----	--

ST308	14	
-------	----	--

m127304	14	
---------	----	--

MAR 1 1 2017
DAS 6
9-89

MAR 1 1 2017
DAS 6
9-89

MAR 1 4 2017
DAS 6
9-89

5
4

DQA: _____ Date: _____



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QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

DART AEROSPACE APICAL INDUSTRIES, INC. dba DART AEROSPACE	ENGINEERING CHANGE NOTICE NO. 04948				SHEET 1 OF 2	
	DWG NO. 647.3900		REV: C	PREPARED BY: M. ANDECK	DATE: 05/04/15	EFFECT ON DWG ☐ INC. ☒ UNINC.
	DWG TITLE: DEFLECTORS					
	APPROVED BY:	ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: CURRENT ORDER	
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REVISED TOLERANCE AND NOTES				ECR: D-15-01

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 157360 MJS
 1703-08

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.
- 10 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.

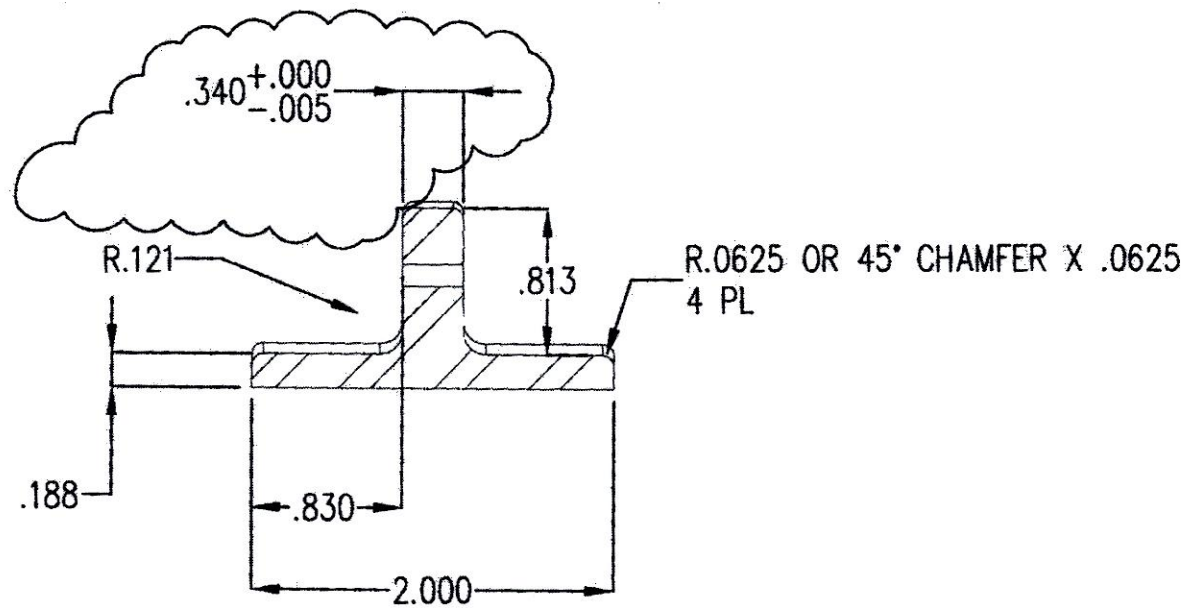
SHEET 1, ZONE B1 IS:

11	R	647.3917	2			DOUBLER		
F/N TC	PART NUMBER	.3903	.3902	.3901		DESCRIPTION	MATERIAL	SPECIFICATION
		QTY						

DOCUMENTS EFFECTED: ☐ PATTERN ☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☒ BOM

CHANGE CATEGORY: ☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED: ☐ YES ☒ NO



SECTION AT-AT

SHEET 11, ZONE C1 IS:

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04556

SHEET 1 OF 2

DWG NO. 647.3900

REV: C

PREPARED BY D. MEJIA

DATE: 06/10/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY: ENGR

MFG

QC

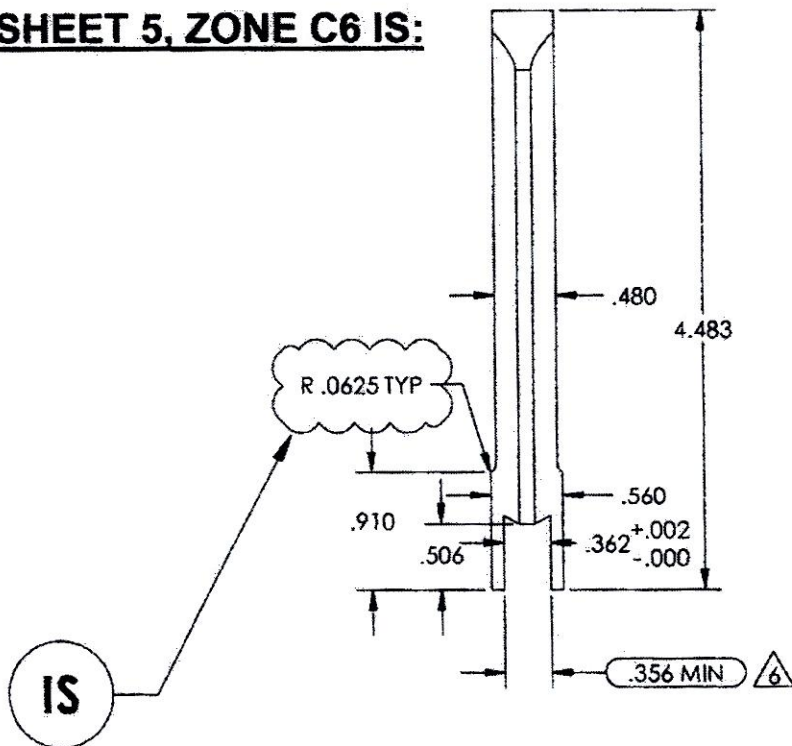
EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD
R-REVISE
C-CREATE
D-DELETE

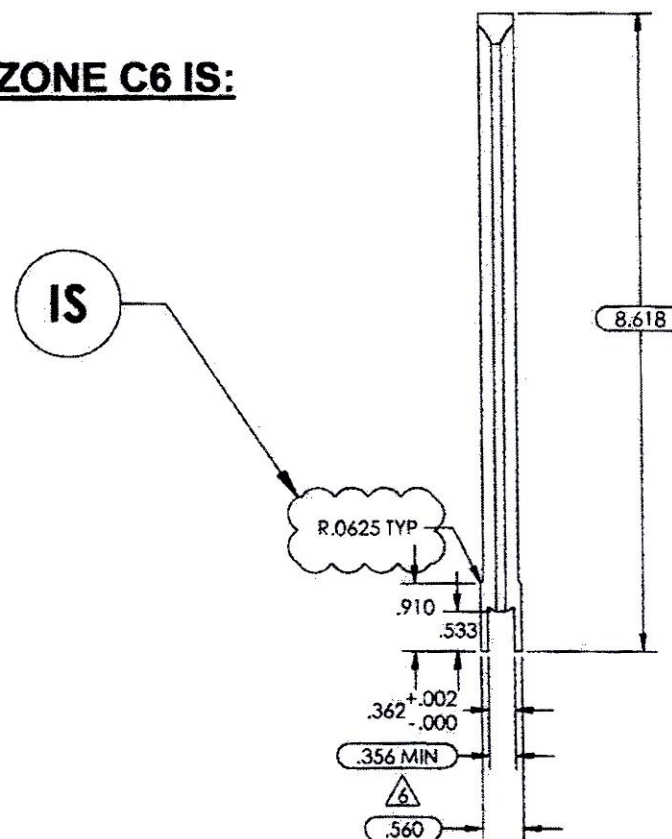
REASON: CHANGED P/N, DIMENSIONS & REVISED BOM

ECR: D-14-04

SHEET 5, ZONE C6 IS:



SHEET 6, ZONE C6 IS:



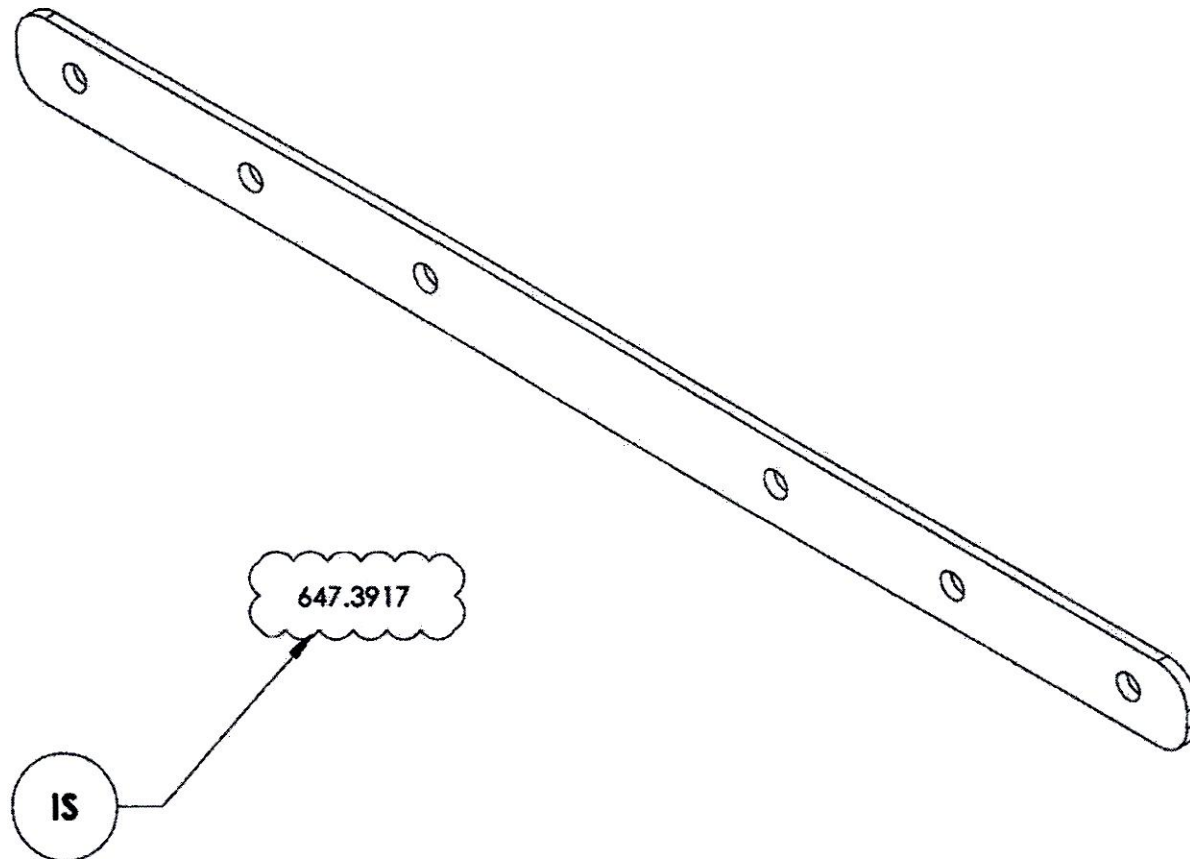
SHEET 1, BOM IS:

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
11	R	647.3917	2	DOUBLER	1	8
		3903	3902	3901		
DOCUMENTS EFFECTED:				CHANGE CATEGORY		
				DER REVIEW REQUIRED		

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM

☐ MAJOR ☒ MINOR

☐ YES ☒ NO

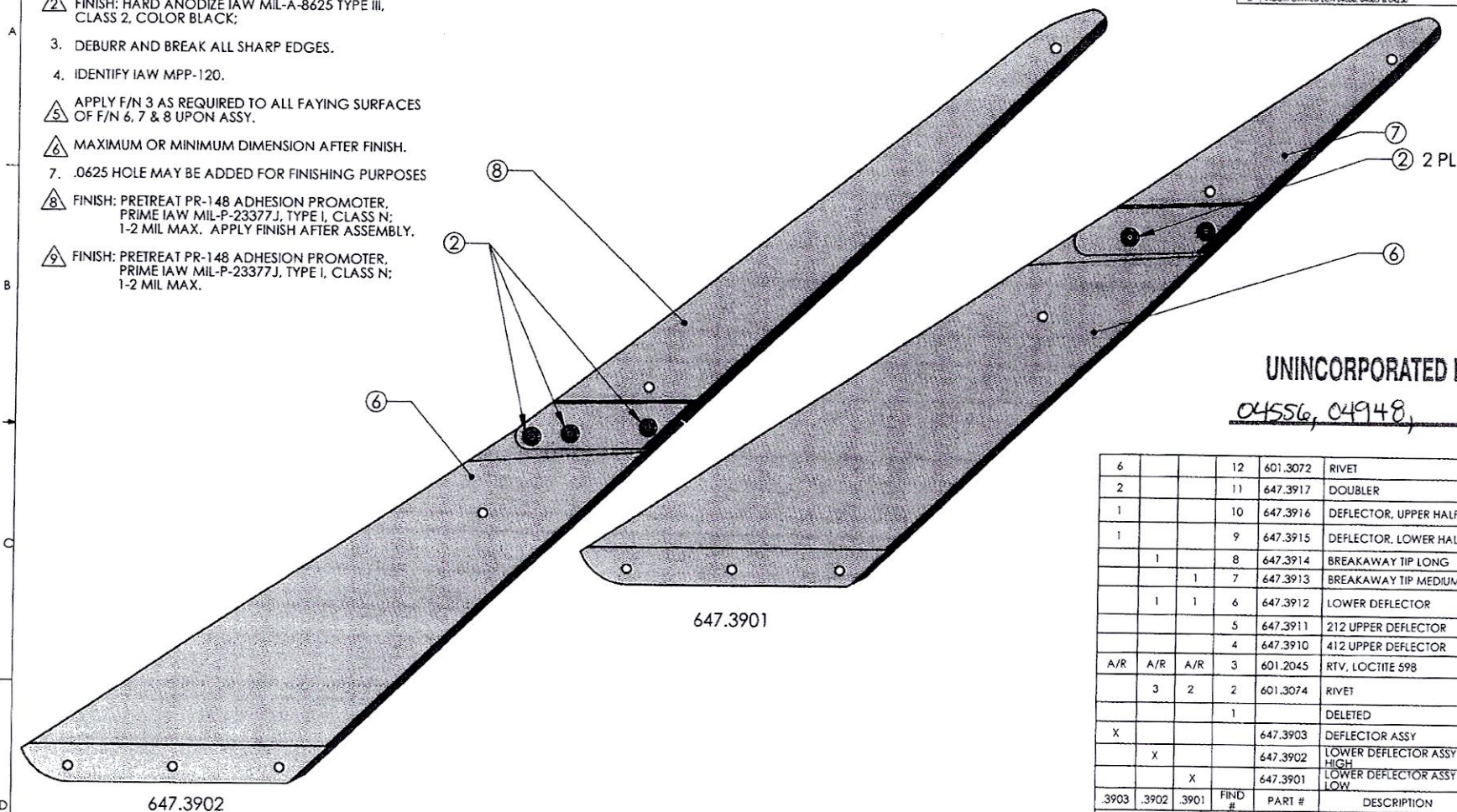
SHEET 12, ZONE B5 IS:

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE RELEASE PERI		N/C
N/C	INITIAL RELEASE	01/10/09	P. BRAVO
A	INCORPORATED ECN 02864, 03039 & 03595	07/24/12	P. BRAVO
B	INCORPORATED ECN 04025	08/02/13	P. BRAVO
C	INCORPORATED ECN 04036, 04085 & 04090	11/18/13	P. BRAVO



UNINCORPORATED ECN(s)

04556, 04948,

6			12	601.3072	RIVET	CR3213-6-9	
2			11	647.3917	DOUBLER		
1			10	647.3916	DEFLECTOR, UPPER HALF	△	△
1			9	647.3915	DEFLECTOR, LOWER HALF	△	△
	1		8	647.3914	BREAKAWAY TIP LONG	△	△△
		1	7	647.3913	BREAKAWAY TIP MEDIUM	△	△△
	1	1	6	647.3912	LOWER DEFLECTOR	△	△△
			5	647.3911	212 UPPER DEFLECTOR	△	△△
			4	647.3910	412 UPPER DEFLECTOR	△	△△
A/R	A/R	A/R	3	601.2045	RTV, LOCTITE 598		△
	3	2	2	601.3074	RIVET	MS20470AD-6-12	
			1		DELETED		
X				647.3903	DEFLECTOR ASSY		△
	X			647.3902	LOWER DEFLECTOR ASSY HIGH		
		X		647.3901	LOWER DEFLECTOR ASSY LOW		
3903	3902	3901	FIND #	PART #	DESCRIPTION	MAT'L	SPEC
QTY	PARTS LIST						
NEXT ASSY (S)				ORIGINAL DATE			
647.3800				UNO-04-101 09-10-09			
				DRAWN BY: D.SCHUR			
				CHECKED BY: D.BARKER			
				DRAWING APPROVAL: P. BRAVO			
				DESIGNED BY: D.SCHUR			
				CONTRACT NO.			
				UNLESS OTHERWISE SPECIFIED			
				DIMENSIONS ARE IN INCHES			
				TOLERANCES ARE:			
				2 PLACE DECIMALS ± .01			
				3 PLACE DECIMALS ± .005			
				ANGLES ± .5°			
				APICAL INDUSTRIES			
				2608 TEMPLE HEIGHTS DR.			
				OCEANSIDE, CA. 92056-3512 (760)724-5300			
				DEFLECTORS			
				REV. C			
				SCALE NONE			
				SHEET 1 OF 12			

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.125 X 45.0° TYP

SECTION B-B

Ø.177 THRU 3PL

.266 X 17.9°

DETAIL A

.045

.603

.923

R.915

4.220±.002

2.110±.002

R3.406

R.279

15.896

15.304

15.046

B

B

Ø.189

6.446

40.2°

.312

0

18.502
18.127

35.8°

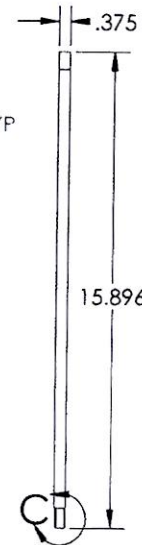
10.702
8.599

6.253
1.700
.777
0

A



DETAIL C



647.3911

ORIGINAL DATE
DRAWN BY
CHECKED BY
DRAWING APPROVAL
P. BRADY
DATE

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

SIZE	CAGE CODE	DWG NO.	REV
B	07M26	647.3900	C
SCALE NONE			SHEET 2 OF 12

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SECTION E-E

$.125 \times 44.9^\circ$

DETAIL D

$\phi .177$ THRU 3PL

$.120$

$.788$

$.274 \times 17.9^\circ$

$2.110 \pm .002$

$4.220 \pm .002$

$R1.100$

$.886$

DETAIL F

$.700$

$.030 \times 45.0^\circ$ TYP

$.340^{+.000}_{-.002}$

$.346$ MAX

647.3910

$.375$

10.850

SECTION E-E

$R.258$

$R3.274$

$\phi .189$

10.842

10.433

9.986

6.457

$\phi .189$

52.1°

35.6°

1.744

$.312$

0

35.8°

15.559

15.291

14.677

10.863

8.803

6.384

1.800

$.914$

0

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

ORIGINAL DATE: 04-10-81
DRAWN BY: J. SCHUR
CHECKED BY: J. BARKER
DRAWING APPROVAL: P. BRAYD
CONTRACT NO.:
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: 1 PLACE DECIMALS $\pm .01$; 2 PLACE DECIMALS $\pm .002$; ANGLES $\pm .5^\circ$.

SIZE: B CAGE CODE: 07M26 DWG. NO.: 647.3900 REV: C
SCALE: NONE SHEET: 3 OF 12

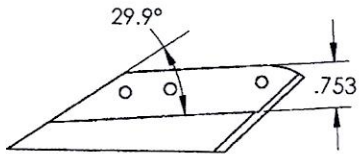
647.3910

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

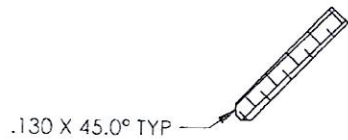
DEFLECTORS

REV B	CAGE CODE 07M16	DWG NO 647.3900	REV C
SCALE: NONE		SHEET 3 OF 12	

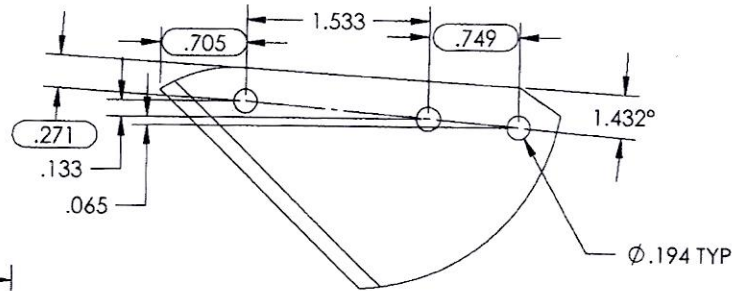
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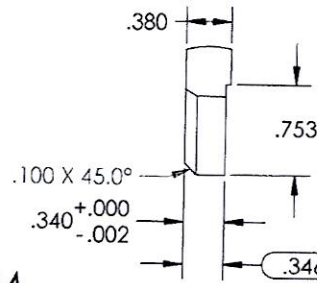
SECTION L-L



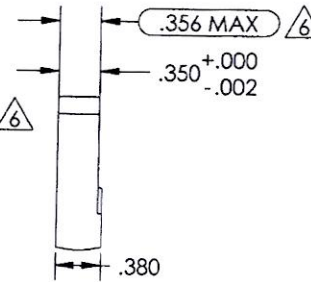
SECTION M-M



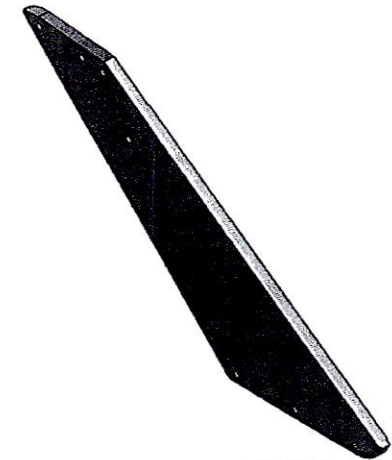
DETAIL H



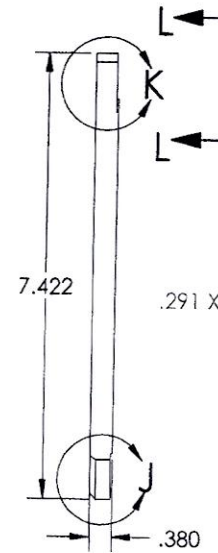
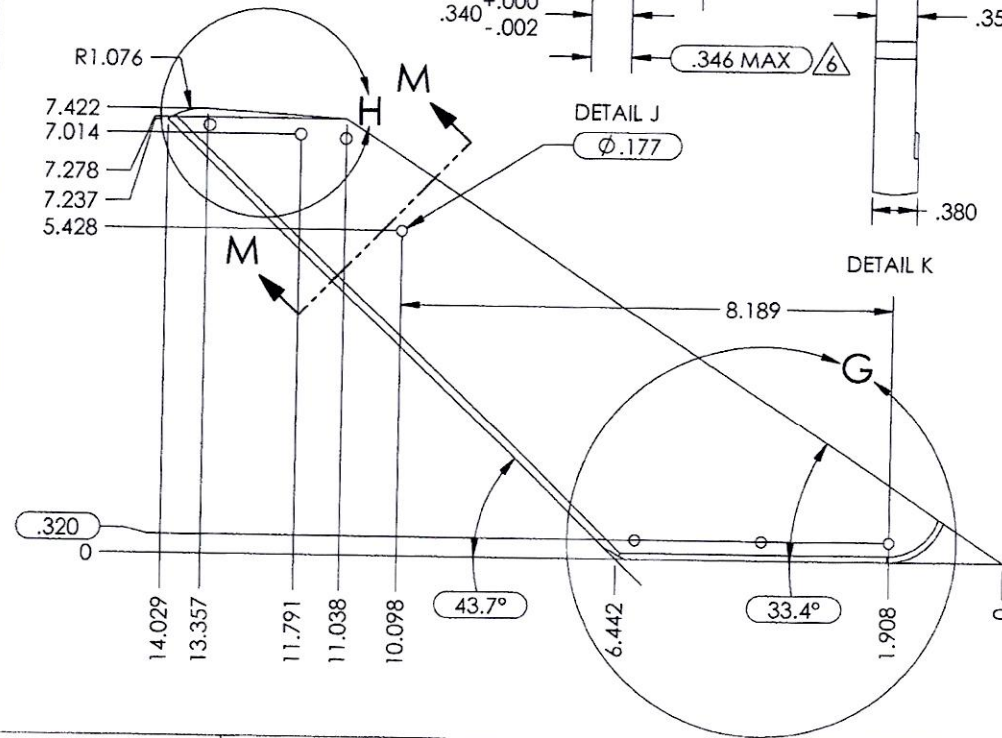
DETAIL J



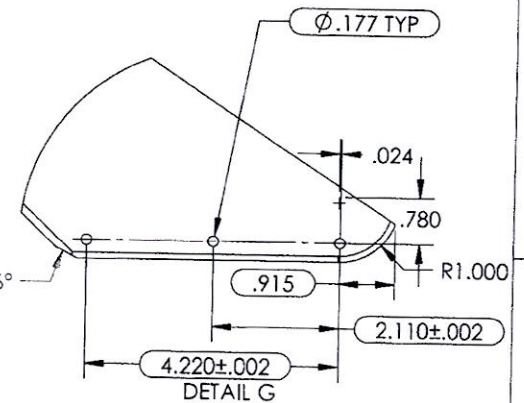
DETAIL K



647.3912

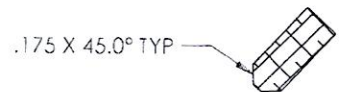


DETAIL G

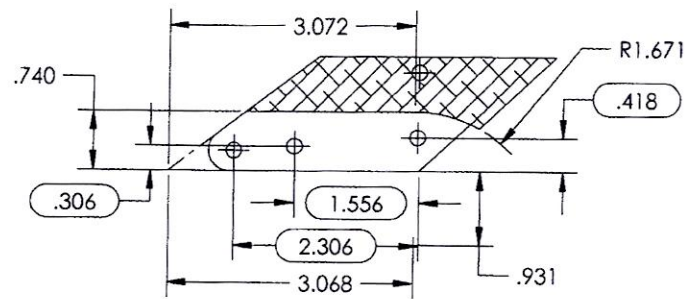


ORIGINAL DATE (MO-DA-YR) 09-13-09		DRAWN BY C. SCHUP		CHECKED BY J. M. PIER	
DRAWING APPROVAL P. BRAVO		CONTRACT NO.		APICAL INDUSTRIES	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		TOLERANCES ARE:		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
2 PLACE DECIMALS ±.01		3 PLACE DECIMALS ±.005		ANGLES 9°	
SIZE	CAD CODE	DWG NO.	REV.	DEFLECTORS	
B	07M26	647.3900	C	SCALE NONE	
				SHEET 4 OF 12	

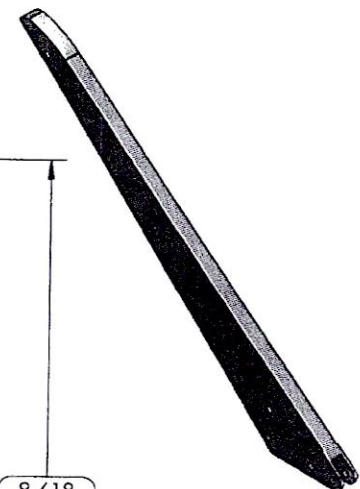
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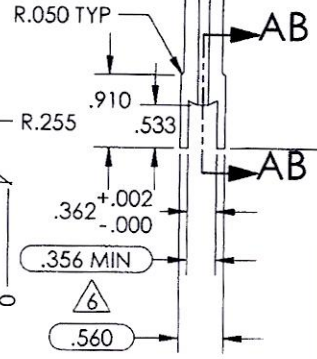
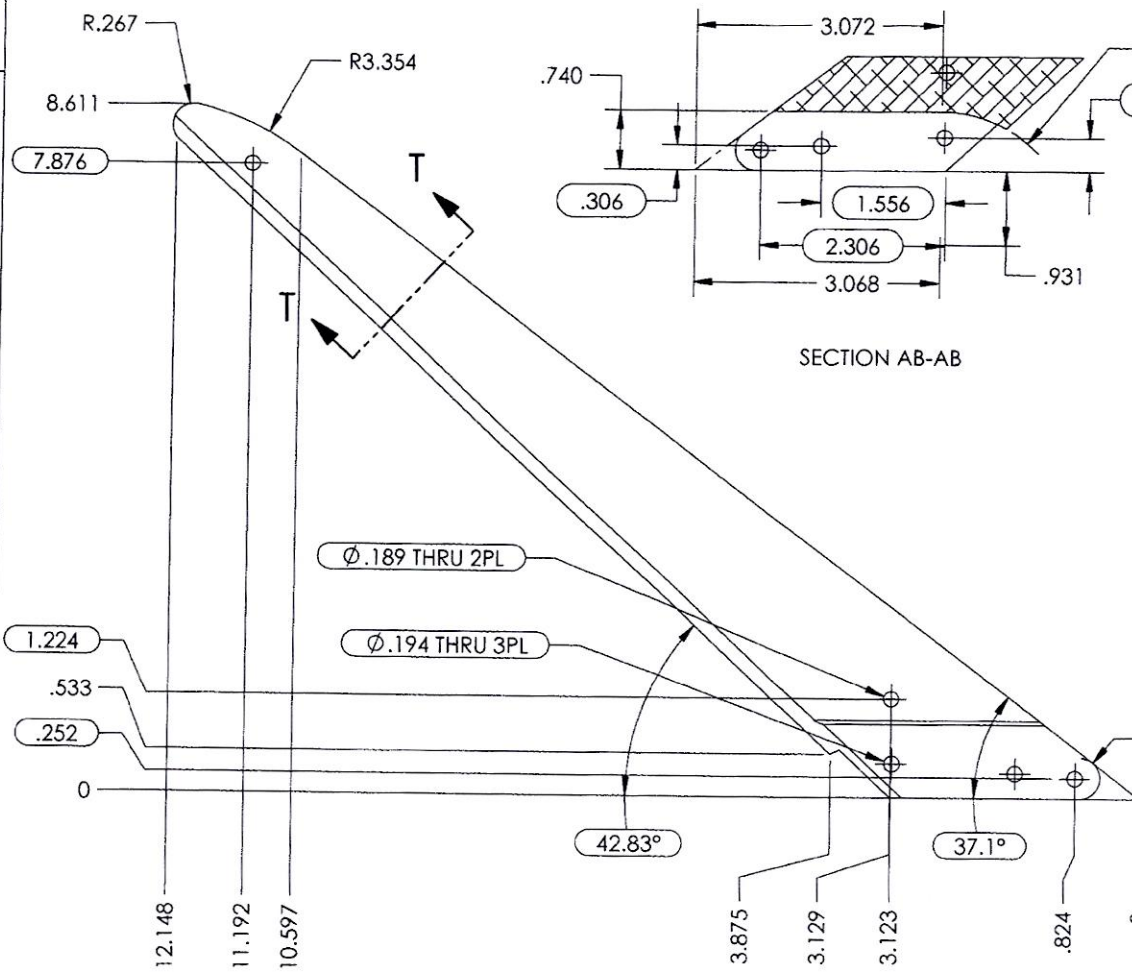
SECTION T-T



SECTION AB-AB



647.3914

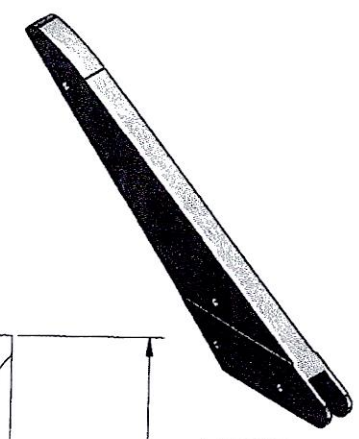
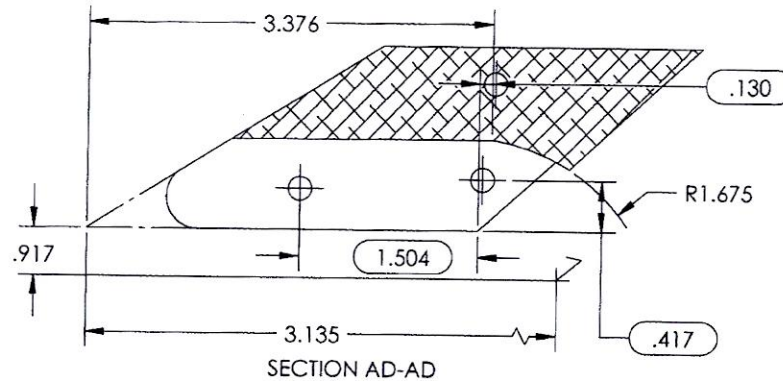


ORIGINAL DATE (MM-DD-YY) 09-10-06 DRAWN BY D. SCHUR CHECKED BY J. BARNER DRAWING APPROVAL P. BRAVO CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET 6 OF 12	REV C

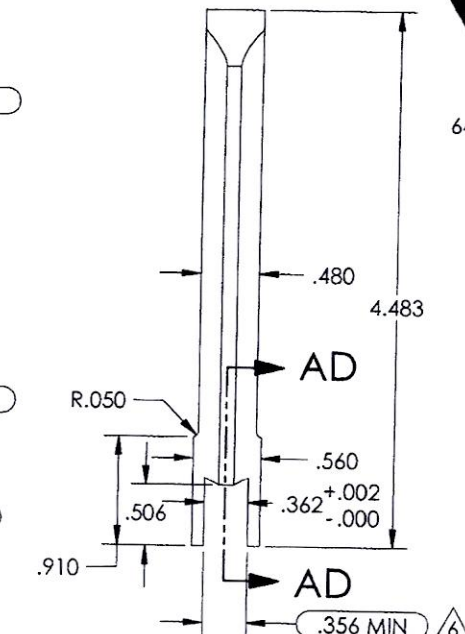
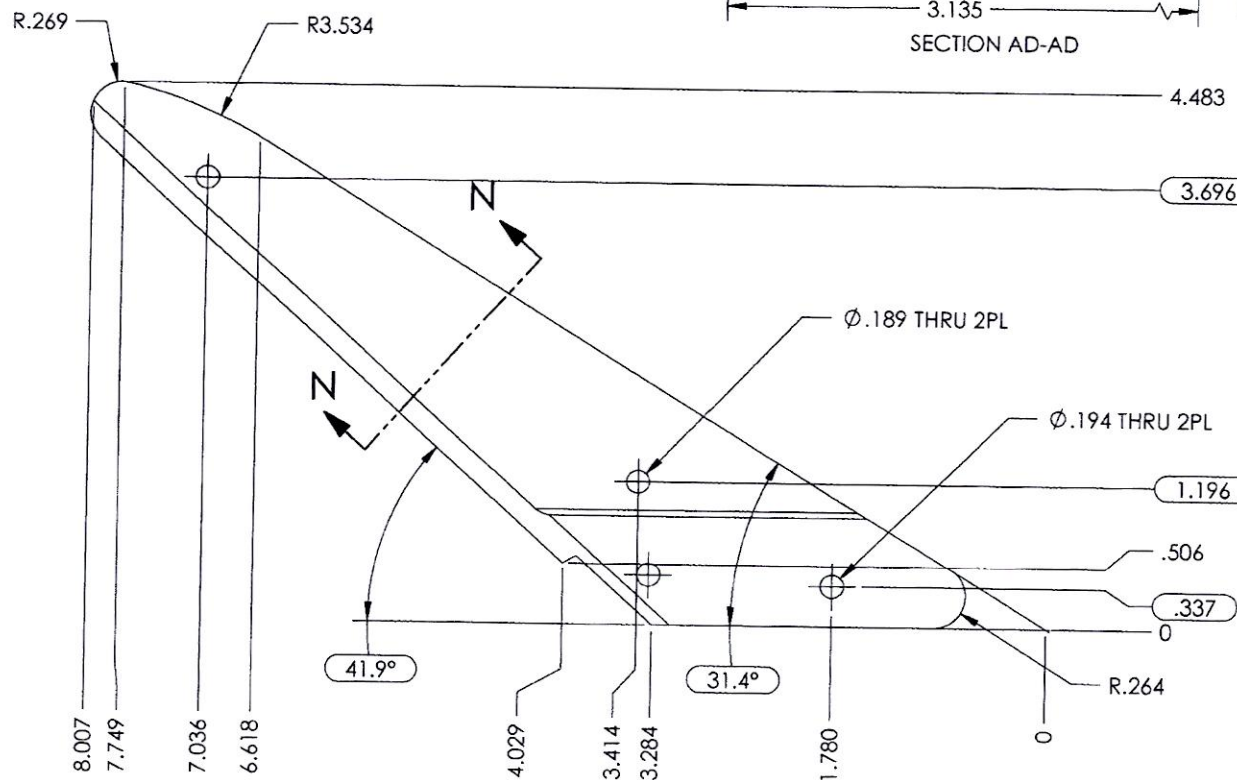
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.180 X 45.0° TYP

SECTION N-N

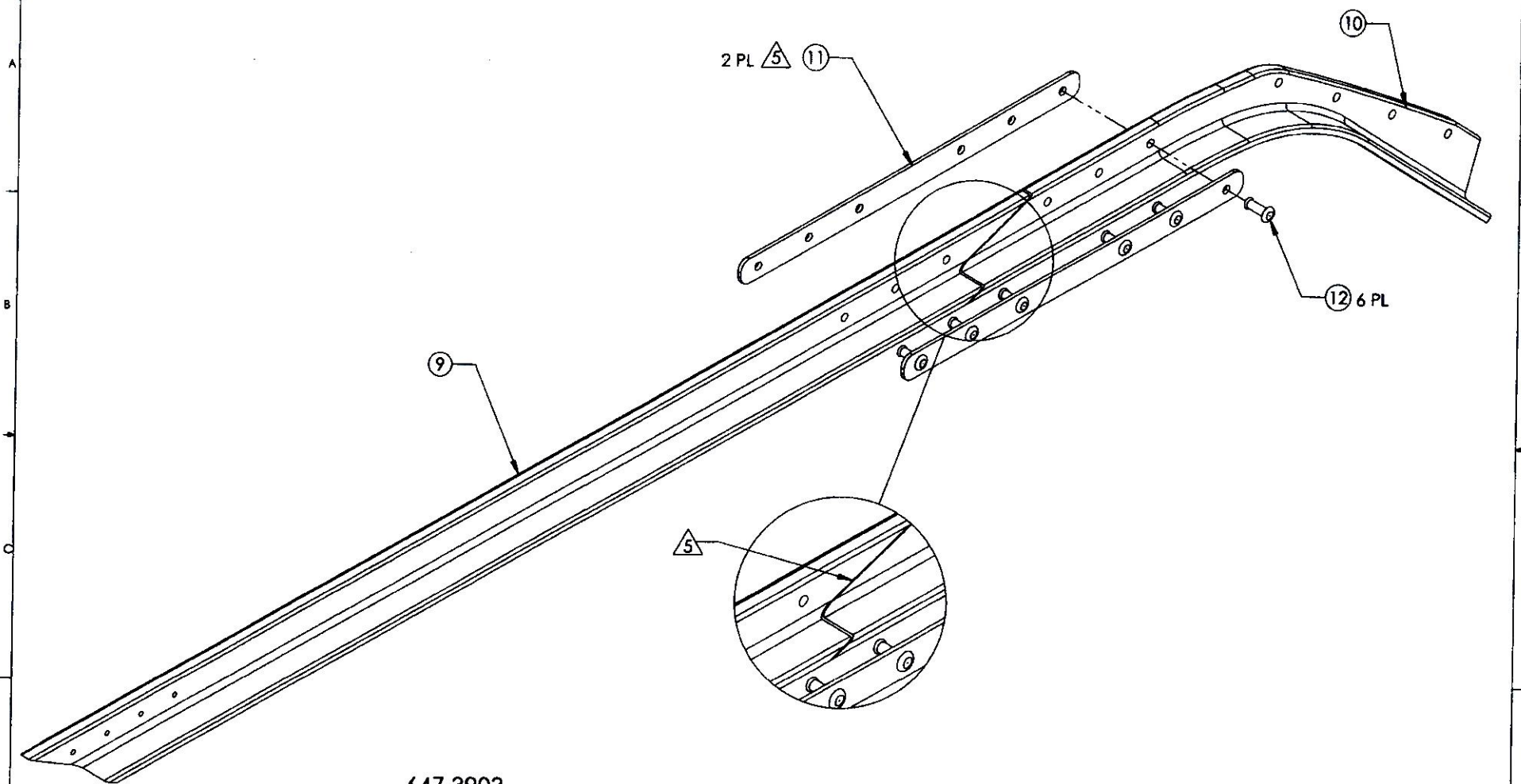


647.3913



ORIGINAL DATE (MM-DD-YY) 08-10-06		APICAL INDUSTRIES	
DRAWN BY D SCHUR		2608 TEMPLE HEIGHTS DR.	
CHECKED BY D BARNER		OCEANSIDE, CA 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAVO		DEFLECTORS	
REVISION CONTRACT NO.		SCALE NONE	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET 5 OF 12	

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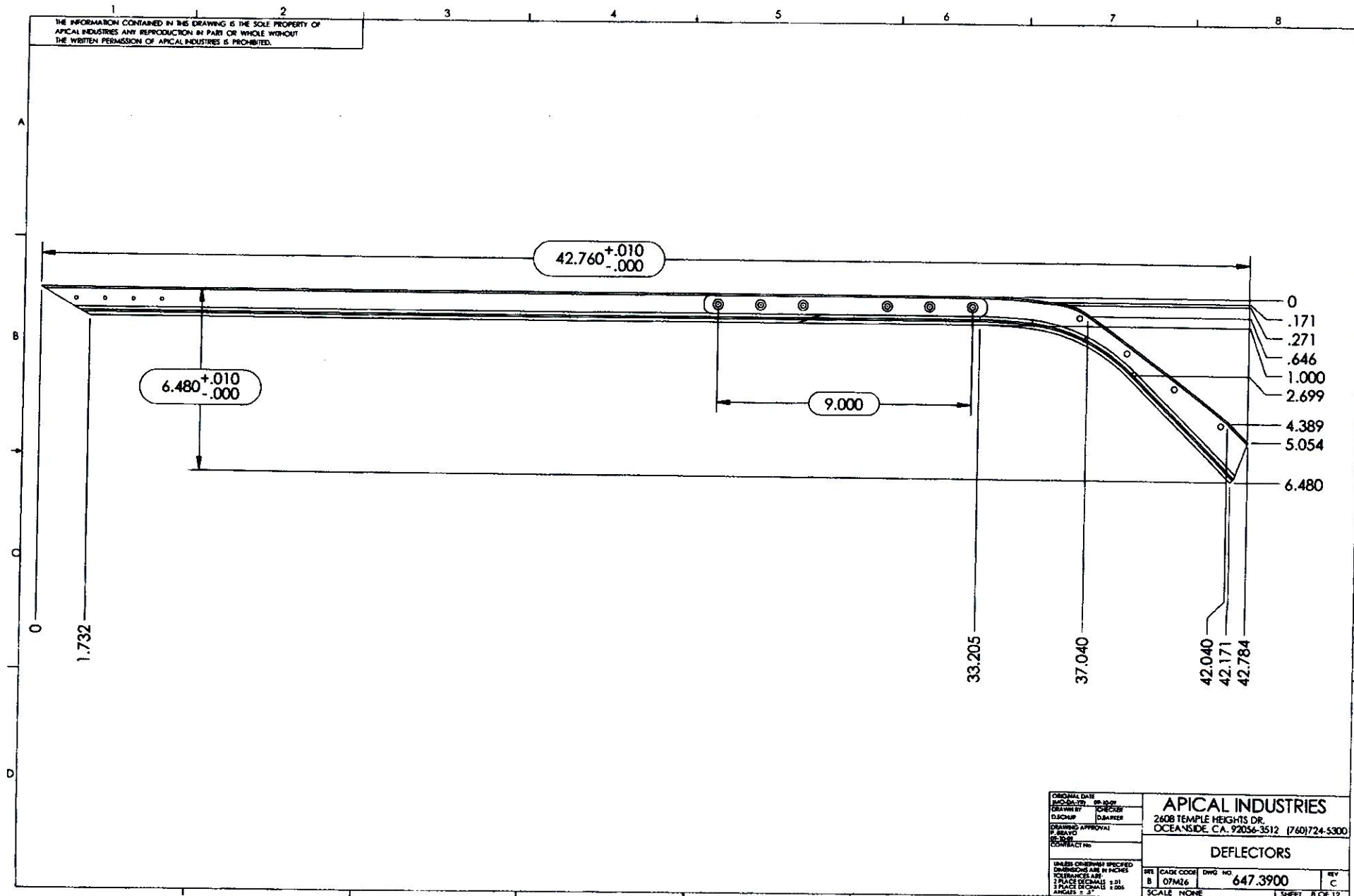
647.3903

ORIGINAL DATE 06-01-78		06-10-78	
DRAWING BY D. SCHUR		D. BARBER	
DRAWING APPROVAL P. BAUVO		06-10-78	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ±.5°			
SHEET	CAOE CODE	DWG. NO.	REV.
B	07MA26	647.3900	C
SCALE NONE		SHEET 7 OF 12	

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

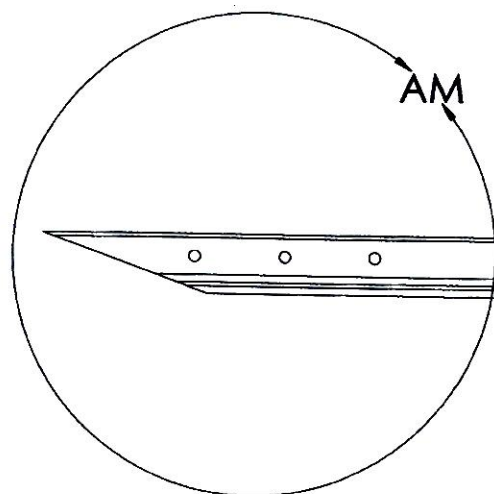
DEFLECTORS

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ORIGINAL DATE		APICAL INDUSTRIES	
MODIFIED BY		2608 TEMPLE HEIGHTS DR.	
DRAWN BY		OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY		DEFLECTORS	
DESIGNED BY		REV	
DESIGNED APPROVAL		C	
P. BRAYO		647.3900	
BY DATE		SCALE: NONE	
CONTRACT NO.		1 SHEET 8 OF 12	
UNLESS OTHERWISE SPECIFIED			
DIMENSIONS ARE IN INCHES			
TOLERANCES ARE:			
1 PLACE DECIMALS ±.01			
2 PLACE DECIMALS ±.005			
ANGLES ±.2°			

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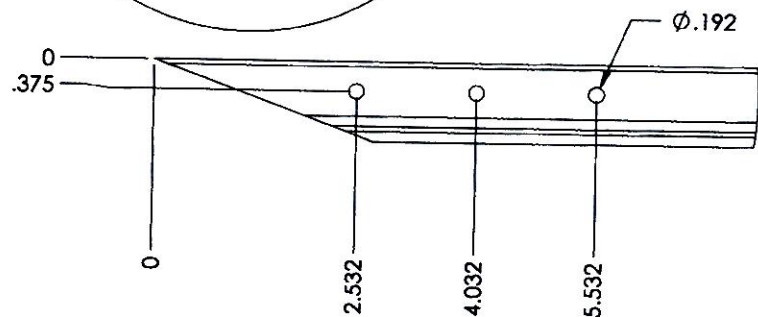
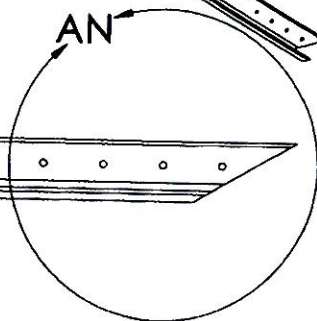
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AR

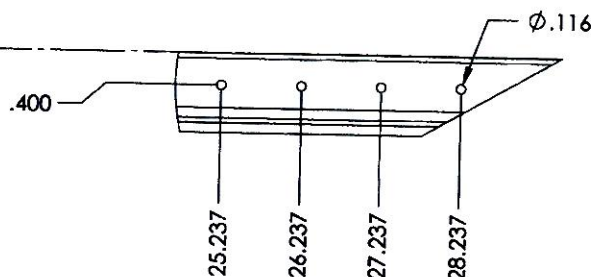
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647.3915

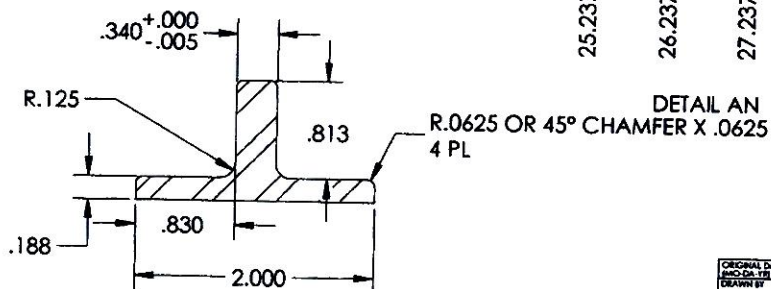
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DETAIL AM



DETAIL AN



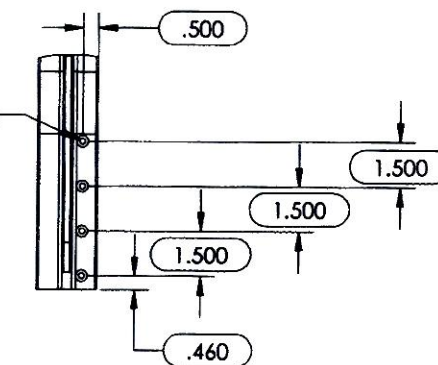
SECTION AR-AR

ORIGINAL DATE APR 1978		APICAL INDUSTRIES	
DRAWN BY D. BURR		2608 TEMPLE HEIGHTS DR.	
CHECKED BY D. BURR		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. BRAY		DEFLECTORS	
CONTRACT NO.		647.3900	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET 8	REV C
SCALE NONE		SHEET 9 OF 12	

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4X $\phi .196 \pm .010$ THRU ALL
✓ $\phi .385 \pm .020 \times 100^\circ \pm 1.000^\circ$

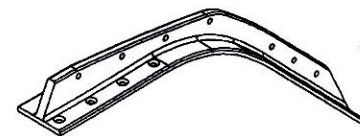


DETAIL AK

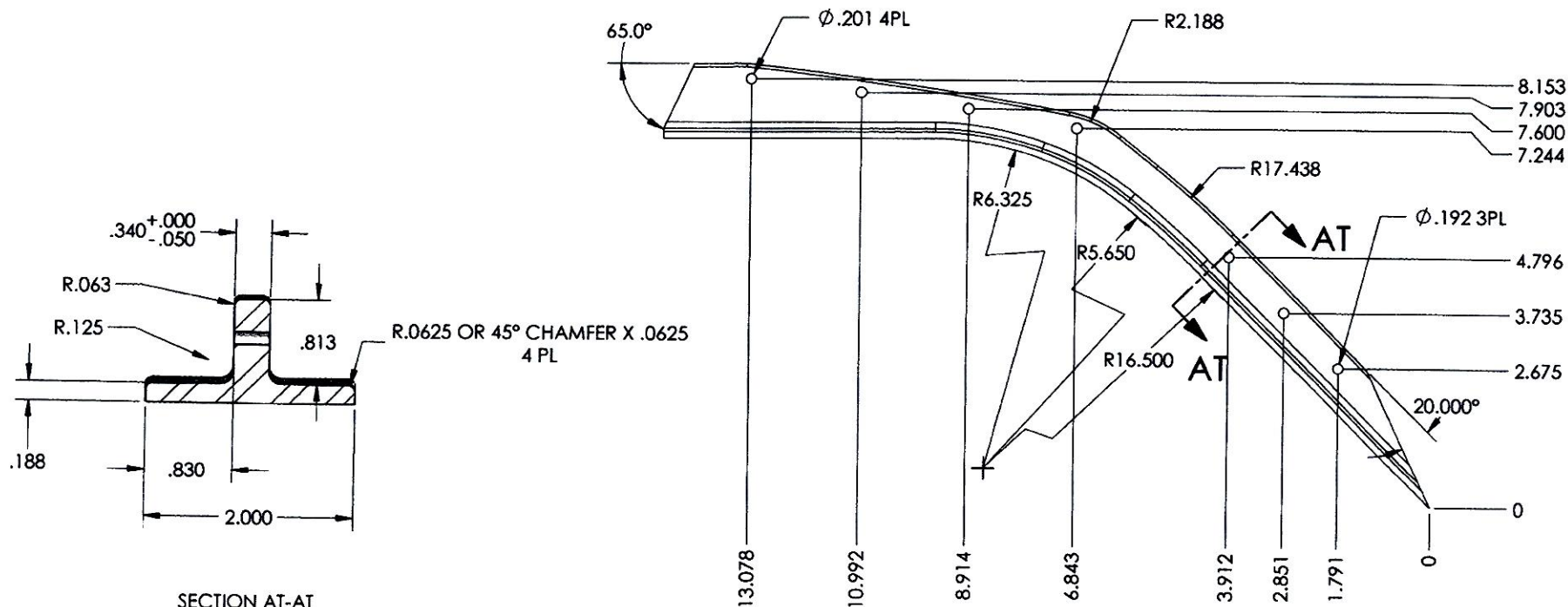
647.3915

ORIGINAL DATE (MM-DD-YY) 09-10-09		APICAL INDUSTRIES	
DRAWN BY D.SCHULP	CHECKED D.BARKER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAY 09-10-09		DEFLECTORS	
CONTRACT NO.		REV B	C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .01 ANGLES ± .5°		QWG. NO. 647.3900	SCALE NONE
		SHEET 10 OF 12	

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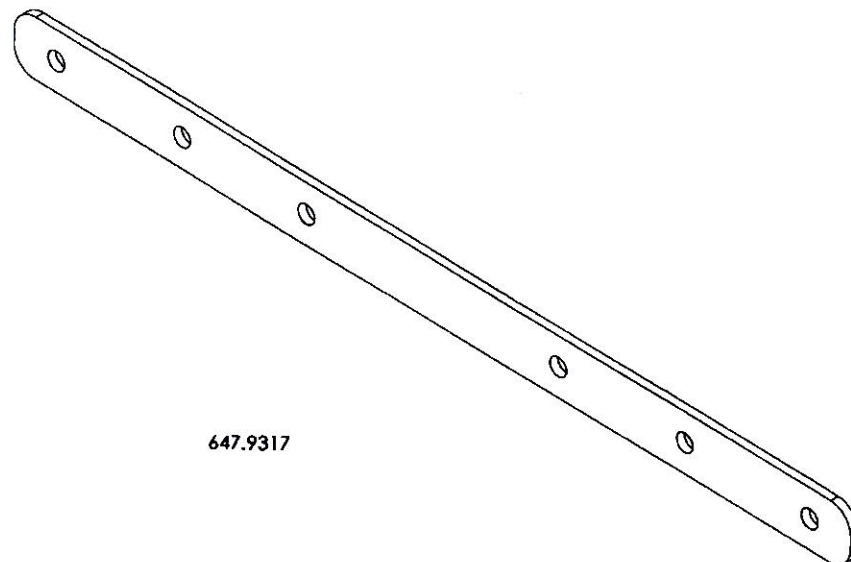
647.3916



SECTION AT-AT

ORIGINAL DATE (MM-DD-YY) 09-18-09	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300			
DRAWN BY D. BURR				CHECKED D. BURR
DRAWING APPROVAL P. BRAVO				CONTRACT NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°				
SHEET B	CAGE CODE 07MA76	ENG. NO. 647.3900	REV. C	
SCALE NONE		SHEET 11 OF 12		

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R.250
4 PL

.625

0

.500

2.000

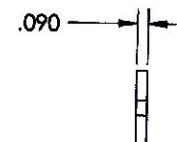
3.500

6.500

8.000

9.500

10.000



Ø.196
6 PL

ORIGINAL DATE 1980-04-19 09:30:00		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWN BY	CSCHKE		
DESIGNED BY	CSCHKE		
DRAWING APPROVAL	CSCHKE		
CONTRACT NO.		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACES DECIMALS ± .01 3 PLACES DECIMALS ± .005 ANGLES ± .5°		SEE CAGE CODE 8 07M26	DWG. NO. 647.3900
SCALE NONE		REV. C	
		SHEET 12 OF 12	